# From System Expansion to System Contraction. Access to Higher Education in Poland

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**Abstract**
The chapter explores access to higher education in Poland when demand-driven educational expansion is changing into educational contraction driven by demographic factors. It combines a theoretical framework with substantial original data analysis. The empirical evidence comes from educational statistics and statistical demographic projections. Educational expansion in Poland in 1995–2010 is related to four major dimensions: age, gender, sector (public/private) and status (full- and part-time). In addition, a section about access related to the intergenerational social mobility in Poland is based on microdata analysis of the EU SILC dataset (European Union Survey on Income and Living Conditions) – to explore the relative mobility of Polish society in Europe (in terms of educational attainment levels and occupational groups). The chapter contributes to academic discussions in four areas: global comparative research on private higher education (and related public/private dynamics), research on inter-sectoral and intra-sectoral differentiation of higher education, international comparative research on post-communist European higher education systems, and international comparative research on social stratification. The chapter refers to Poland and several post-communist European higher education systems which combine two features: a vast expansion following the fall of communism after 1989 and sharply falling demographics in the next two decades.

**Key words:** higher education contraction, demographics, equity and access, selectivity, Polish universities

## Introduction

The chapter explores access to higher education in Poland at a specific moment when demand-driven educational expansion following the collapse of communism in 1989 is changing into educational contraction driven by demographic factors. The pairs of expansion/contraction and growth/decline in European higher education, related to demographic trends, have not been discussed in research literature so far and the chapter is intended to contribute to themes expected to be highly relevant to most European post-communist countries.

The chapter is divided into six sections: a brief "Introduction"; "System expansion and its major parameters"; "System expansion and selectivity in

higher education"; "Inequality in access to higher education: Poland in a European comparative perspective"; "The demographic decline and the universal fees options"; and "Conclusions". The chapter combines a theoretical framework with substantial original data analysis. The empirical evidence of the chapter comes from both Polish national educational statistics and Polish national statistical demographic projections. Two sections in particular provide detailed analyses of original empirical data: the second section presents analyses of educational expansion in Poland in 1995–2010 based on four major dimensions: age, gender, sector (public/private) and status (full- and part-time). The fourth section about access related to intergenerational social mobility in Poland is based on a microdata analysis of the EU SILC dataset (*European Union Survey on Income and Living Conditions*) that explores the relative mobility of Polish society in Europe (in terms of educational attainment levels and occupational groups). The chapter refers and contributes to several lines of theoretical thinking in global higher education research. In particular, it contributes to academic discussions in four areas: global comparative research on private higher education (and related public/private dynamics), research on the inter-sectoral and intra-sectoral differentiation of higher education, international comparative research on post-communist European higher education systems, and international comparative research on social stratification. The chapter refers not only to Poland but also to several post-communist European higher education systems which combine two features: a vast expansion following the fall of communism after 1989 and sharply falling demographics in the next two decades.

Two national contexts are relevant to the present chapter. The first is that Polish higher education shows complicated inter-sectoral public-private dynamics and one of the highest degrees of marketisation of the system in Europe (in 2010, it had the biggest share of enrolments and enrolment numbers in the private sector in Europe, 31.5% and 0.56 million, and a high share of fee-paying students, 51.6%, GUS 2011: 55). Studies in the public sector are either tuition-free (full-time) or fee-based (part-time); studies in the private sector are fee-based in both full-time and part-time modes. The second context is that radical demographic changes have been projected for the next three decades. The population of the 19–24 age group is projected to be decreasing in the 2007–2025 period by 43% (GUS 2009: 171) and the number of students is projected to be decreasing from 1.82 million (in 2010) to 1.33 million (in 2020) to 1.17 million (in 2025; see Instytut Sokratesa

2011: 10-14, IBE 2011: 110-111, Vincent-Lancrin 2008: 45).[1] The decline in student numbers in the coming decade is a relatively disregarded parameter in national higher education strategies (see Ernst and Young 2010: 20-21) in international country reports (by both the OECD and the World Bank) or in academic discussions of mass higher education in Poland (Bialecki and Dabrowa-Szefler 2009: 185-186 and 194). The chapter links access to higher education in Poland to the exploration of different past roads of expansion of the system and to the implications of the system's contraction.

It is generally assumed in both higher education scholarly and policy literature that, generally, major higher education systems in both the European Union (EU) and the OECD area will be further expanding in the next decade (Altbach et al. 2010, King 2004, Attewell and Newman 2010, Santiago et al. 2008, OECD 2008, EC 2011). Expanding systems generally contribute to social inclusion because, as recently concluded in a large-scale comparative study on stratification in higher education, the expanding pie "extends a valued good to a broader spectrum of the population" (Arum et al. 2007: 29). In the knowledge economy, the expansion of higher education systems is key and higher enrolment rates and increasing student numbers in the EU have been viewed as a major policy goal by the European Commission throughout the last decade (EC 2011: 3, Kwiek 2006, Kwiek and Kurkiewicz 2012). Questions of admission, selection criteria and funding mechanisms in the last two decades in Poland were until recently asked in a rapidly expanding system, with ever growing numbers of both students and institutions (Duczmal and Jongbloed 2007, Dobbins 2011: 155-162, Bialecki and Dabrowa-Szefler 2009). Yet they may need to be reformulated for the coming decade of the system's contraction. The dramatically changing demographics introduce new dilemmas related to public funding and admission criteria.

The present chapter explores specific Polish responses to questions about who is admitted and publicly funded and who should be admitted and publicly funded, changing over time, viewed as highly relevant to other countries in Europe with similar admission patterns (with public/private

1 In a less pessimistic enrolments scenario, the decrease is expected to be from 1.82 million in 2010 to 1.48 million in 2020 to 1.34 million in 2025 (Vincent-Lancrin 2008: 47). A report from a Polish think tank, the Socrates Institute, predicts a decline in the number of students from 1.82 million in 2010 to 1.52 in 2015 to 1.25 million in 2010 (Instytut Sokratesa 2011: 14).

dynamics) and similar demographic trends for the future (such as Bulgaria, Romania, Estonia, Lithuania, Latvia and Slovakia as well as, to a smaller degree, the Czech Republic, Hungary and Slovenia). Research into the two decades of expansion is combined with a brief exploration of the possible implications for access of the contraction of the higher education system in the next decade.

## System expansion and its major parameters

Access to higher education, the credentials arising from it, and employability are closely linked (Schomburg and Teichler 2011, Knight 2009). In general, throughout the 1990–2010 period in Poland, there was a clear divide between credentials from traditional metropolitan, elite public universities (in the tuition-free, full-time mode of studies) and credentials from all other types of institutions and modes of studies (with the part-time fee-paying mode of studies in the Polish context being much less academically demanding than the tuition-free full-time mode). The hierarchy of institutions and programmes was clear: "most highly valued were non-paying regular courses in trendy and attractive fields of study at several renowned state universities" (Bialecki and Dabrowa-Szefler 2009: 194-195). Selection criteria are demanding in the former case only. They are often merely formal (meeting minimum formal requirements) in all other (public and private) higher education institutions and in both (full-time and part-time) modes of studies. Consequently, educational outcomes, the quality of diplomas and the life chances of graduates tend to vary increasingly, leading to the diversification and segmentation of Poland's higher education system.

Generally, strict meritocratic criteria are only used for deciding on institutional admissions in two cases: in highly competitive elite metropolitan and in less competitive non-elite regional public universities – but only in their tax-based or tuition-free places. In all other cases, and whenever fees are charged, in both public and private sectors higher education has for two decades been open to all those who could afford it and meet the basic formal criterion: the possession of a secondary school matriculation certificate. Higher education in all those other cases became affordable because of the "quasi-market" competition pressures (Le Grande and Bartlett 1933: 13-34) between the ever increasing numbers of private higher education institutions

(334 in 2010) and the growing engagement of all public institutions (131 in 2010) in providing additional, part-time, fee-based studies. The large-scale competition for fee-paying students led to open-access policies for fee-paying students in both sectors (Kwiek 2008 and 2010).

In the first decade of the expansion (in the 1990s), following the collapse of communism, the difference between graduating from elite metropolitan public universities and graduating from all other types of institutions was not an issue of public concern. The differences in the life chances of graduates were not clearly visible. Families with high socio-economic capital, usually from the former class of intelligentsia then turning gradually into the new middle class of professionals, were sending their children to full-time, tuition-free places in elite metropolitan public universities, as they had always done in the whole post-war period. The social structure in Poland shows not only a very high level of inheriting levels of education and occupations across generations, as discussed in more detail in section 4, but also a very high level of inheriting institutional types of higher education: first-generation students are far more likely to choose academically less demanding higher education: the fee-based, part-time mode in both sectors.

Tuition-free places in elite metropolitan public universities were scarce and available on rigid meritocratic selection criteria, although increasing throughout the 1990s. These universities were trying to retain their high quality teaching in times of ever increasing student numbers by channelling the newcomers, mostly from lower socio-economic classes, into their paid study offers, especially bachelor degree studies of considerably lower academic quality. This is consistent with the results of a recent large-scale empirical study of education and labour markets in Central Europe, where Poland was included in the case studies (Kogan et al. 2011: 337).

The expansion took different routes, as discussed in detail below; to a large extent, these routes determine the routes of the future contraction and the major policy strategies to combat it. The expansion is broken down here into four components: expansion by age, by gender, by sector (public/private), and by student status (full-time/part-time). The data below show disaggregated enrolments in 1995 and 2010, and the disaggregated enrolment increase in the 1995–2010 period. Overall, student numbers rose from about 790,000 to about 1,841,000 (or by 133%). Bialecki and Dabrowa-Szefler (2009: 185) recently summarised the drivers of the expansion in enrolments as being “on the one hand, the society’s growing

educational aspirations and, on the other, a significant broadening of the tertiary-level education on offer".

Analysing the age structure of students in 1995 and in 2010, the increase in enrolments was most marked in the traditional student age group (the percentage of the distribution of the increase was 70% for those aged 19–24 and about 30% for those aged 25 and more). While the enrolment increase in the former age group was about 955,000, in the latter it was about 405,000 (GUS 1996: 192-193, GUS 2011: 138-142). The expansion was also heavily gendered: about 40% of the increase involved male students, and about 60% female students. Consequently, the feminisation of studies, already present in 1995, became even more marked in 2010: while the rise in the number of male students in the period was about 412,000, for female students it was more than 50% more, or about 640,000 (GUS 1996: 2, GUS 2011: 55). From a public-private sectoral perspective, despite the emergence and massive growth of the private sector in the period, the private sector accounted for less than half of the total growth (about 47%, or about half a million students; ibid.). Finally, the expansion was fuelled slightly more by fee-based part-time studies in both sectors than by full-timers. The number of part-timers went up from about 340,000 in 1995 to about 900,000 in 2010. As a consequence of the 163% increase in numbers of part-timers, the distribution of the 1995–2010 rise was about 48% for full-time students and about 52% for part-time students (ibid.). To sum up, the distribution of the expansion in the period studied was the following: new students were mostly of a traditional age (70%), female (60%), studying slightly more often in a part-time mode (52%) and slightly more often in the public (54%) than in the private sector.

What is important in the context of the changing access to higher education is the fact that the past distribution of the increase in enrolments (by age, gender, sector and status) in the period of educational expansion is highly relevant to the possible future distribution of the decrease in enrolments in the contraction period, as well as for national policies in the conditions of educational contraction. The patterns of expansion may determine the patterns of contraction. For instance, one evident way to combat the contraction is to increase the participation rate of male students in both the traditional 19–24 age bracket and older. Other traditional tools for increasing student numbers may fail: these include lowering the rate of early school-leavers, increasing the transition rate from secondary to tertiary education, raising the graduation rate from higher education, and increasing

enrolment rates. As a recent *Youth in Europe* report shows, Poland already has the second lowest rate of early school-leavers in the European Union (after Slovenia, with only 5%, EC 2009: 94); Poland also ranks first in entry rates at the tertiary education level (with 85% in 2009, OECD 2011: 316), and ranks second in graduation rates at tertiary level (after Slovakia, with 50.2%, OECD 2011: 68). Finally, enrolment rates are already higher than the average for both EU and OECD countries (reaching 53.8% in 2010, GUS 2011: 26). Any research into future educational contraction must take the above limitations into account.

As discussed above, the expansion was accompanied by the hierarchical differentiation of the system (see Huisman and van Vught 2009, Meek et al. 1996, and Goedegebuure et al. 1996): much of the growth was absorbed by public and private second-tier institutions and by first-tier public institutions in their academically less demanding and less selective part-time study mode. The expansion also took place in specific fields of study, in particular such as social sciences, economics and law (in 2000, the share of enrolments in this field of study was 37% in the public sector and 72% in the private sector, and a decade later in 2010 it was still 32.8% and 52.6%, respectively, GUS 2011: 58). When, as in the Polish case, quantitative equality is reached at the level of higher education, qualitative differentiation becomes increasingly important: "qualitative differentiation enables education systems to reduce inequalities along the quantitative dimension because qualitative differences replace quantitative ones as the basis for educational selection" (Shavit et al. 2007: 44). Qualitative differentiation means different types of institutions and different types of study programmes. As Shavit et al. argue, "expansion can be implemented in different ways. It is reasonable to assume that the effect of the expansion of higher education on inequality in enrolments depends on the characteristics of the new institutions" (ibid.). The new institutions in the Polish case were both new public regional universities, new private institutions as well as metropolitan elite public universities in their fee-based part-time, academically much less demanding, mode of studies. The access of older students to second-tier institutions is considerably higher in the private sector and marginal in the first-tier institutions (GUS 2011: 138-142).

While communist period higher education between 1970 and 1990 in Poland could be described as unified, following Meek, Goedegebuure, Kivinen and Rinne (Meek et al. 1996: 206-236) and Shavit, Arum, and Gamoran (Shavit et al. 2007: 5-6), the last two decades of its expansion reveal a transformation from a unified to a diversified system. Unified

systems, as under communism in Poland, "are controlled by professional elites who are not inclined to encourage expansion, either of their own universities or through the formation of new ones" (ibid.: 5). Higher education in Poland was also predominantly "a political force and a political institution. It has been given precise political tasks" (Szczepanski 1974: 7). It was also highly research-focused, in a Humboldtian manner. The number of students in the two decades of 1970–1990 was strictly controlled and, in general, was not increasing (but fluctuating between 300,000 and 470,000), and the strict *numerus clausus* policy was the rule in all Central European countries. While Western European systems were already experiencing massification processes in the 1980s, higher education in Central Europe was as elitist in 1990 as it was in decades past (for Western Europe, see especially Scott 1995 and Palfreyman and Tapper 2009). One of the major reasons of the phenomenal growth of private higher education following the collapse of communism in 1989 in (some) Central European countries, and in Poland in particular, was the heavily restricted access to public higher education under communism combined with newly opened private sector employment. Increasing salaries in the emerging private sector gradually pushed young people into higher education. Consistently with Geiger's findings (1986: 107), the private sector in Poland was forced to operate "around the periphery of the state system of higher education".

## System expansion and selectivity in higher education

The newcomers to the education sector after 1989, especially from the lower socio-economic classes, were going *en masse* to new regional public universities and to fee-based tracks in elite metropolitan public universities, as well as to the emergent fee-based private sector. The expansion of the system between 1990 and 2005 increased the number of students from about 0.4 million to almost 2 million. In the first decade of expansion, the difference between graduating from various types of institutions seemed largely irrelevant, especially to first-generation students and their families. After 1989, "the 'entrepreneurial spirit' and 'possessive individualism' – which had been blocked under communism by administrative obstacles – found an outlet" (Domanski 2000: 29). Higher education credentials from any academic field, any institutional type and any mode of studies were viewed by the newcomers as a ticket to a good life and rewarding jobs.

The most valuable vacancies – those in elite metropolitan public universities in full-time mode of studies – were scarce and competitive. They were socially valuable not only because they were tuition-free but because they were academically demanding. All other vacancies, much less socially valuable from a larger perspective, and conceived as much less socially valuable by the intelligentsia-turned-middle classes – were offered to all, in fee-based modes, over the two decades. During the expansion period, higher education was both accessible and affordable (Duczmal and Jongbloed 2007, see the definitions in Knight 2009) and the recognition of its differentiation by type of institution and by mode of studies was low. The undifferentiation of the educational arena, paradoxically, seemed useful to all stakeholders: students and their parents, public and private institutions, and the state. The state was boasting ever rising enrolment rates and increasing education of the workforce; public institutions were offering part-time studies for fees and this non-core non-state income played a powerful role in maintaining the morale of academics by increasing their university incomes; and private institutions were showing all elements of a traditional institutional drift – they were emulating the public institutions. The gradual stratification of the system increasingly became common knowledge and governed most student choices only in the second decade of the expansion when the labour market was saturated with new graduates (totalling about 2 million in 1990–2003).

During the times of expansion, questions about equitable access (Knight 2009) and fair selection criteria were not asked and issues of social justice (Furlong and Cartmel 2009) were not publicly raised, either in official policy documents (including several national strategies for higher education and official rationales for new draft laws on higher education, see Ernst and Young 2010), or in the scholarly discourse. Expansion was viewed as a public good in itself, and its details related to fairness and inclusion were generally both under-researched in academia and under-debated in the public domain. Official higher education statistics and labour force statistics were showing a highly positive picture of the emerging well-educated society with an increasing share of the workforce with higher education credentials. The national and regional statistics did not differentiate between the types of institutions attended and modes of studies. But the system's expansion stopped in about 2005 and enrolments contracted from about 2 million to about 1.8 million in 2010. This contraction continues today and is expected to go on at least until 2025.

The expansion in Poland in both public and private sectors was demand-driven: students and their families demanded more access to higher education following the collapse of communism, and their demand was being increasingly met (Bialecki and Dabrowa-Szefler 2009, Duczmal and Jongbloed 2007, Kwiek 2008). Higher education was no longer strictly rationed by the state, and the processes of massification were fuelled by both sectors and both modes of studies. External shocks related to the "post-communist transition" in the economy and the financial austerity prevalent throughout the 1990s were driving the dynamics of institutional change. Universities were driven by expansion-related phenomena and academic institutions (and academics themselves) were responding in the way the resource dependence perspective used in organisational studies would expect them to: seeking how to manage to survive, in the mutual processes of interaction between organisations and their environments (Pfeffer and Salancik 2003: 258-262, also see van Vught 2009), at both the micro-level of individuals and meso-level of institutions. Specifically, "the key to organisational survival is the ability to acquire and maintain resources" (Pfeffer and Salancik 2003: 2): In the Polish context of the 1990s, maintaining resources meant additional private expenditures borne by students (in both public and private sectors) and additional per-student public funding from the state (public sector only; on the consequences for the university research mission, see Kwiek 2012a and Kwiek and Maassen 2012).

Following Arum et al. (2007: 8ff), we can use the distinction between "client-seeker" (with low admissions criteria) and "status-seeker" (with "fewer clients than could otherwise be admitted") institutions. Both public and private sectors were strongly "client-seeking" in the times of the expansion; the question is to what extent "client-seeking" behaviors may be even more pronounced in these times of contraction, with far-reaching consequences for admissions criteria and selectivity throughout the system. "We expect to find greater enrolment rates and more institutional differentiation in market systems than in state-funded systems" (Arum et al. 2007: 8).

The Polish system is more market-like than most state-funded European systems but also much more state-funded than most global market-funded systems, as in the United States, Korea or Japan. The increasing stratification of higher education institutions along the client-seeking and prestige-seeking lines was a discernible process in the times of system expansion. What will happen to the process in the times of the system's contraction? All institutions, public (elite and regional) and private

(both semi-elite and demand-absorbing, see Levy 2011: 388-389) might be forced to become increasingly client-seeking (with perhaps no significant difference as to whether the clients will be tuition-free students funded by the state or self-funded fee-based students, and no matter whether universal fees in the public sector are finally introduced in the coming decade or not). The public sector may find it necessary to become aggressively client-seeking, as the private sector was throughout the last two decades.

It can be assumed that in contracting systems the selectivity of all institutions, both elite and regional, semi-elite and demand-absorbing, in both public and private sectors can be expected to decrease over time. Admissions criteria can be expected to be less stringent, and access for candidates from lower socio-economic classes may be increasingly less based on meritocratic criteria in institutions which are highly selective today. The metropolitan elite public universities may be expected to become more accessible to all social strata if their current capacities (human resources and infrastructure) are to be maintained. To continue their current levels of selectivity, they would have to decrease their capacities as the contraction processes impact in the next 15 years.

Consistently with findings in global private higher education literature, in Polish private higher education the largest growth occurred through the non-elite, mostly demand-absorbing, types of institutions (Levy 2009, Levy 2011, Geiger 1986). As elsewhere in rapidly expanding systems, most students were "not choosing their institutions over other institutions as much as choosing them over nothing" (Levy 2009: 18). Like in other countries, a demand-absorbing private subsector tended to be both the largest private subsector and the fastest growing one. Now this is the most vulnerable subsector in the setting of declining demographics. The growth of private higher education did not necessarily mean 'better' services, or 'different' services: it meant most of all 'more' higher education (Geiger 1986: 10, Enders and Jongbloed 2007: 20). Consistently with Geiger's findings about "peripheral private sectors" in higher education (as opposed to "parallel public and private sectors", 1986: 107ff), the university component of higher education was monopolised by a public institution and non-university, postsecondary component by private institutions. "Market segmentation" rather than open competition with the dominant public sector, operating in "special niches" (Geiger 1986: 158), was the general characteristic throughout the last two decades.

Recent policy proposals about the public subsidising of the private sector and the introduction of universal fees in the public sector (2011) seem to indicate a possible change in policy patterns in financing higher education. Following Levy's typology of public/private mixes in higher education systems (Levy 1986), recent changes might indicate a policy move towards the homogenisation of the two sectors. Private-public blends involve a number of important questions: a single sector or a dual one, if a single sector – statist or public-autonomous, if dual sectors, homogenised or distinctive, if distinctive, minority private or majority private (ibid., 198)? The move, in this typology, would be from the fourth pattern (dual, distinctive higher education sectors: smaller private sector funded privately, larger public sector funded publicly) to the third pattern (dual, homogenised higher education sectors: minority private sector, similar funding for each sector; Levy's first and second patterns refer to single systems, with no private sectors). The policy debates about private-public financing emergent in Poland today are not historically or geographically unique. Levy identified three major policy debates in his fourth pattern of financing: the first concerns the very growth of private institutions; the second concerns whether new private sectors should receive public funds; and the third policy debate concerns tuition in the public sector. While in the expansion period of the 1990s the debate about growth dominated in Poland, the contraction period of the 2010s can be expected to be dominated by fees and public subsidy debates.

The question of inequality in access to higher education, usually asked in the context of educational expansion, could also be asked in the context of educational contraction: "the key question about educational expansion is whether it reduces inequality by providing more opportunities for persons from disadvantaged strata, or magnifies inequality, by expanding opportunities disproportionately for those who are already privileged" (Arum et al. 2007, 1). In the Polish case, the question can refer to the (past) expansion and the (expected) contraction of the system. Contraction seems unexpected in the context of the knowledge-economy policy discourse which refers to the ever increasing need for a better educated workforce (see e.g. Santiago et al. 2008, EC 2011 and education attainment benchmarks in the EU *Europe 2020* strategy for growth and jobs). This policy discourse in Europe largely ignores the sharply falling demographics in major post-communist European countries, with Poland in the forefront.

## Inequality in access to higher education: Poland in a European comparative perspective

The decade and a half of continuous educational expansion in Poland is expected to reduce social inequality and enable faster upward social mobility. Traditionally, higher education is the main channel of upward social intergenerational mobility (that is, it enables individuals to cross class boundaries between generations, see DeShano da Silva et al. 2007, Holsinger and Jacob 2008). Intergenerational social mobility reflects equality of opportunities. Class origins in more mobile societies determine labour market trajectories to a higher degree than in less mobile societies (Archer et al. 2003, Bowles et al. 2005, Furlong and Cartmel 2009). Younger generations 'inherit' education and 'inherit' occupations from their parents to a greater extent in less mobile societies. Young European's educational futures and occupational futures look different in more and in less mobile European societies.

Our brief comparative analysis of social mobility is based on microdata from the European Union Survey on Income and Living Conditions (EU-SILC). [2] For research on intergenerational educational and occupational mobility in Poland, the most useful is the EU-SILC 2005 module on "The intergenerational transmission of poverty". The module provides data on the attributes of respondents' parents during their childhood (age 14–16) and reports the educational attainment level and the occupational status of each respondent's father and mother. In almost all European OECD countries there is "a statistically significant probability premium of achieving tertiary education associated with coming from a higher-educated family, while there is a probability penalty associated with growing up in a lower-educated family" (Causa and Johansson 2009b: 18). Fairness in access to higher education in Poland is linked here to the issue of the intergenerational transmission of educational attainment levels and occupational statuses of parents from a European comparative perspective. If Polish society is less mobile than other European countries, then the need for more equitable access is greater. While

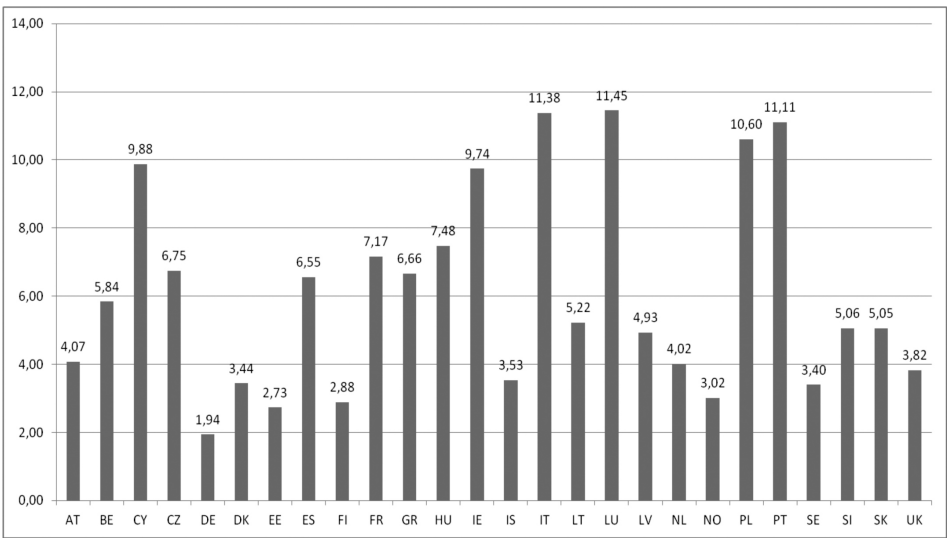
2 The survey collects microdata on income, poverty and social exclusion at the level of households and collects information about individuals' labour market statuses and health. The database includes both cross-sectional data (in a given period of time) and longitudinal data (which can be followed periodically). For most countries in the pool of 26, the most recent data available come from 2007 and 2008.

absolute numbers can speak for themselves, we are assuming here that the numbers will tell us more in the comparative context set out below.

What we present here is a brief assessment of the relative 'risk ratio' (which shows how a given attribute of one's parents makes it more likely that the offspring will show the same attribute, see Causa and Johansson 2009b: 51 and 2009a) of 'inheriting' levels of educational attainment and 'inheriting' occupations in transitions from one generation to another generation in Poland from a cross-national perspective.

Poland is a European country with one of the highest relative risk ratios (over 10) for persons with a tertiary education having their father with a tertiary education. There are only four European systems (Poland, Portugal, Italy and Ireland; plus the two tiny systems of Luxemburg and Cyprus) which markedly stand out in variations across countries: in all of them, the probability of a person whose father's education is 'tertiary' having a tertiary education is about ten times higher than someone whose father's education is lower than tertiary. The probability of 'inheriting' tertiary education in Poland is on average almost two times higher than in other European countries (the average for 26 countries being 6.06, and the average for eight post-communist countries being 5.97). The details are given below in Figure 1.

*Figure 1. Relative risk ratio for a person with a tertiary education relative to their father's tertiary education*

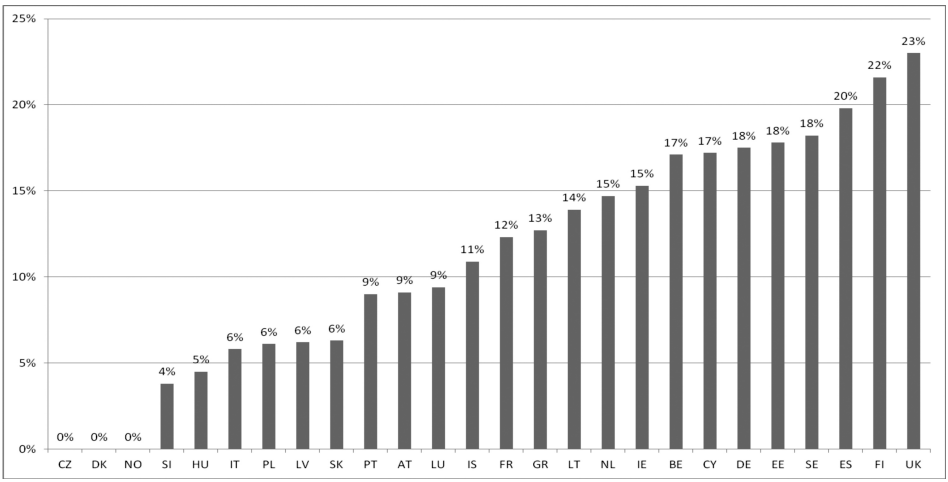



Source: own study based on the EU-SILC 2005 module on "The intergenerational transmission of poverty"

On the basis of the EU-SILC data, we can follow the transmission of education and the transmission of occupations across generations: how parental educational and occupational backgrounds are reflected in children's educational and occupational backgrounds. Educational status and occupational status are strong attributes carried across generations (Archer et al. 2003, Breen 2004: 1-17, Goldthorpe 1987: 121-146, Kogan et al. 2011: 337-345).

Figure 2 below shows the probability of a respondent achieving a tertiary education given that his/her parental level of education is only primary. In more mobile societies, the probability will be higher; in societies in which intergenerational mobility is lower, the probability will be lower. There is a major divide between a cluster of countries which include Poland (and several other former communist countries, as well as Italy) in which the upward mobility is low, and the probability is in the range of 4–6%, and Nordic countries, Belgium Germany, Estonia, Spain and the UK in which the mobility is 3–4 times higher, and the probability of a 'generational leap' between generations is 3–4 times higher, in the range of 17–23%). Other countries are in the middle. The probability of upward intergenerational mobility through higher education is, from a comparative perspective, clearly very low in Poland.

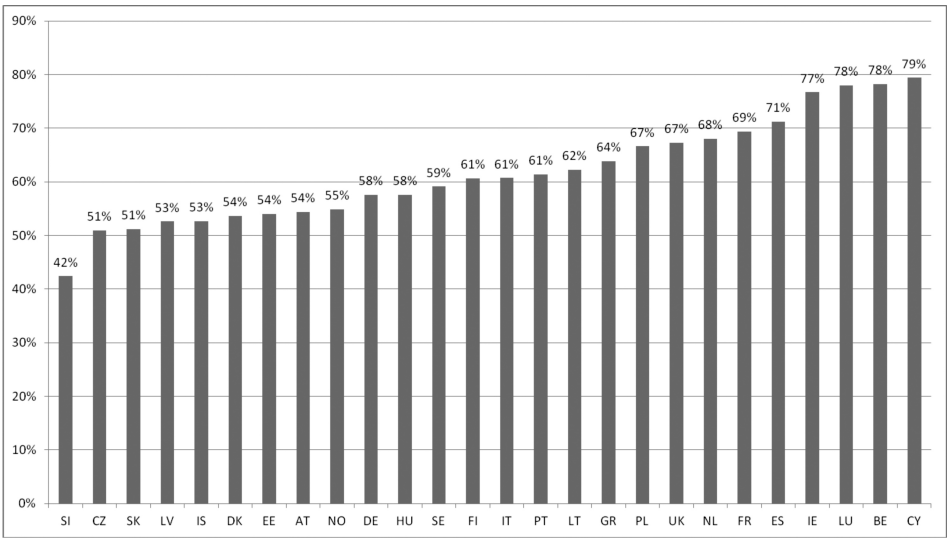
*Figure 2. Transition from parents' primary education to respondents' tertiary education*




Source: own study based on the EU-SILC 2005 module on "The intergenerational transmission of poverty" (0% for CZ, DK, and NO results from a too low number of respondents in these countries).

Figure 3 below explores social mobility in Poland from a different perspective: the rigidity of educational backgrounds across generations, or the inheritance of tertiary education across generations. Overall, in all 26 European countries studied (except for Slovenia), the chance of a respondent whose parents have a tertiary education attainment level having a tertiary education attainment level is more than 50%. The lowest range (50–60%) dominates in several post-communist countries, as well as in Denmark, Austria, Norway, Germany and Sweden). The highest range (70–79%) is shown only for Spain, Ireland and Belgium, as well as the two small systems of Luxembourg and Cyprus. Poland (67%) lies in the upper-middle range of 65–70%, and eighth from the top.

*Figure 3. Transition from parents' tertiary education to respondents' tertiary education*




Source: own study based on the EU-SILC 2005 module on "The intergenerational transmission of poverty"

Analyses performed with reference to ISCO-88 (International Standard Classification of Occupations) Group 1 occupations (translated into "highly skilled white collar") in relation to parents' occupation show that while, overall in Europe, the 'inheritance' of highly skilled white-collar occupations is high, and is generally in the 50–70% range, in Poland it is very high and reaches 67% (fifth from the top).

Thus, to sum up the above comparative section: upward educational social mobility in Poland (despite the 1990–2005 expansion period) is still limited, and the level of inheritance of both educational status and occupational status across generations is quite high, compared with other European countries. The changes in mobility between social strata are long-term, and the recent expansion period in higher education is still short enough to change the basic social structure in Poland. Both the highest educational attainment levels and the most socially rewarded occupations ("highly-skilled white-collar") are inherited in Poland to a stronger degree than in most European countries, except for most post-communist countries. Poland seems to differ more from more mobile Western European systems and less from most immobile post-communist systems in its educational social mobility than traditionally assumed in the research literature (e.g. Domanski 2000). Polish society in general is less mobile compared with most Western European systems because the links between parents' and children's social status as adults (in both educational and occupational terms) are closer. "In a relatively immobile society an individual's wage, education or occupation tends to be strongly related to those of his/her parents" (OECD 2010: 184; see Kwiek 2013). While the expansion period substantially increased equitable access to higher education in Poland, upward social mobility viewed from a long-term perspective of changes between generations is still limited. Consequently, from a European comparative perspective there is a much greater need for fair access to higher education than commonly assumed in educational research.

## The demographic decline and the universal fees option

The continuance or reversal of the trend of reducing inequality in access to higher education in Poland depends on a number of factors: gross enrolment rate; wage premium for higher education; the number of tuition-free vacancies and fee-based vacancies available in the public sector; national higher education funding policies (including cost-sharing mechanisms in the public sector, state subsidising of the private sector, public investments in education and research infrastructure); the internationalisation of studies; and enrolments of students in non-traditional ages.

Some factors may redefine public-private dynamics in the system without actually changing the trend of inequality reduction (the system may

move gradually from a "dual and distinctive" ideal typical model to a "dual and homogenised" ideal typical model according to Levy's typology of public/private mixes in funding regimes: both sectors may be funded in the next decade through fees and direct public subsidies, see Levy 1986). Further inequality reduction from this perspective may thus be sector-blind. (In the present chapter, we are focusing more on the intersectoral public/private differentiation rather than on intrasectoral differentiation in any of the two sectors; on various notions of differentiation in higher education, see Rhoades 1990: 191, Geiger 1986: 75-106, van Vught 2009: 7-11, Goedegebuure et al. 2007: 11-13, and on explorations of how social change in general can be seen as a process of differentiation, see Alexander 1990: 1-15).

Demographic shifts are expected to powerfully affect new admission patterns in both sectors and may increase the access of lower socio-economic classes to higher education throughout the system. The number of 19-year-olds was increasing throughout the 1990s and until 2002. Since then, already for a decade, the number has been decreasing and, according to national demographic projections, it will be dropping for more than a decade. In 2020, there will be about 360,000 19-year-olds compared with about 612,000 in 2005 and 534,000 in 2010 (GUS 2009: 171). Moreover, the pool of potential students (traditionally in the 19–24 age bracket in Poland) will be steadily decreasing every year until 2020, from about 3.4 million in 2010 to about 2.3 million in 2020, in both urban and rural areas (a decrease of 31% within a decade). The fall in the size of the population in the 19–24 age bracket will continue until 2025 and in 2035 the population will be only 64.15% of the 2007 population (ibid.: 170).

The future of equitable access to higher education, inequality reduction and changing admission patterns are linked to demography much more strongly in post-communist European countries (Poland in particular) than in Western European countries (although, as reminded by Preston, Heuveline, and Guillot (2001: 135), "the accuracy of population forecasts can only be assessed after the fact"; in this particular case, population forecasts are more accurate because, for the period up to 2025 studied here, "after all, the people have already been born and almost all of them will survive" (Frances 1989: 143). Just as there were several parallel routes via which the educational expansion occurred in Poland (as shown in section 2 above), there are possible several parallel routes leading to the educational contraction.

Overall, an increase in rates of access or a change in the length of studies may offset decreases in the cohort size. Studies may last longer and access rates depend on the eligibility rate and the proportion of those eligible who indeed enrol (different aspirations, incentives, but also different numbers of vacancies): "the actual proportion of entrants also depends, among other things, on the cost of higher education, the financial pressures confronting those otherwise eligible, pecuniary (and non-pecuniary) advantages that they hope to gain from higher education and the length of their studies from an opportunity cost perspective". Student enrolment levels lag behind changes in the size of younger age cohorts, and the demographic shift takes several years to become noticeable (Vincent-Lancrin 2008: 44).

The fall in enrolment levels in Poland is projected to be one of the highest in Europe, and comparable only with other post-communist countries: Bulgaria, Romania, Slovakia, Estonia, Lithuania and Latvia. According to several consistent enrolment scenarios based on national statistical data (such as e.g. Vincent-Lancrin 2008: 45, Instytut Sokratesa 2011: 10-14, IBE 2011: 110-11, Ernst and Young 2010: 20) enrolments in Poland in 2025 are expected to drop to 55–65% % of the 2005 levels. In Western Europe, only Spain and Germany can expect numerical decreases of more than 200,000 students by 2025 (Vincent-Lancrin 2008: 49-51). Certainly, as Easterlin (1989: 138) confirmed in the US context, there is an "inverse association between college enrolment rates and the size of the college-age population" (and what Frances terms "the cohort effect", Frances 1989: 143): "enrollment rates, in fact, partly depend on the size of the college-age population – other things remaining constant, at the aggregate level a larger college-age population makes for lower enrollment rates, while a smaller college-age population makes for higher rates" (Easterlin 1989: 137). Demographic factors need to be combined with social, economic and public-policy related factors in any meaningful projections for the future.

Higher education systems in the OECD area in general are expected to continue to expand (Altbach et al. 2010); as Attewell in his global study of educational inequality around the world put it, "so far, the growth in demand for more years of education seems to have no limit. … Each new generation exceeds its parents in terms of average years of schooling completed" (Attewell 2010: 1). Therefore, the implications of an educational contraction for equitable access, institutional selectivity and admissions criteria in Polish higher education (as well as higher education in such post-communist

European countries as Bulgaria, Romania, Estonia, Lithuania, Latvia and Slovakia) are important research areas. The institutional will to survive the demographic decline is overwhelming, but the logics governing access to publicly-funded vacancies in the past expansion era may differ from the logics governing them in the expected contraction era.

Access to higher education in Poland has been powerfully related to the public-private dynamics in higher education (Duczmal and Jongbled 2007, Kwiek 2008, 2011a and 2012b). The biggest private higher education system in Europe ("independent private" in OECD terms, fee-based in practical terms) may be heavily dependent in its future survival on a change in higher education financing – namely, the introduction of universal fees (that is, for both full-time and part-time students) in its competing public sector. Within the current funding architecture (with no fees in the growing full-time segment in the public sector), namely, if universal fees are not introduced, the private sector may be heavily reduced in size until 2025. Maintaining the tax-based public sector amid declining demographics might threaten the very existence of the private sector as there have been divergent trends of decreasing numbers of students and increasing numbers of tuition-free vacancies in the public sector, combined with substantial public investments in public university infrastructure in the last five years. Mergers between public and private institutions, envisaged in the new law of March 2011, might be a possible survival strategy for the sector.

The decline of private higher education is a rare theme in scholarly literature, as it is a rare phenomenon from a global perspective. As Levy stresses, "the most vulnerable private higher education is the demand-absorbing type, which underscores that all parts of the sector do not face constant vulnerability" (Levy 2010: 11-12). Poland (together with several other post-communist European countries) is exceptional from a global perspective: both private shares in enrolments and also absolute enrolments in the private sector were decreasing in the 2007–2010 period. The private higher education sector may expect to have fewer students every year and, for a system in which there are 325 private institutions, this poses an enormous challenge. In post-communist Europe short-term declines have already occurred (Slantcheva-Durst 2010: 13). The expected demographic shift creates a major institutional challenge to all public institutions; but for private institutions it may be a life or death challenge, as lamented by the Polish conferences of private sector rectors (KRUN, and since 2005, KRZaSP). As a recent study by the national Institute for Educational

Research (IBE 2011: 110) points out, "it has to be assumed that a part of newly created private institutions, of relatively poor educational offer, opened to meet the demand from the generation from the 1980s … will not be able to survive" (ibid.). The single survival strategy suggested by the Institute is to change the offer from higher education to adult education. These findings are consistent with Levy's global conclusions about private higher education (ibid.: 5): "Much PHE [private higher education] has not had to offer very much, other than access and the prospect or hope of a degree. Logically, then, it is the demand-absorbing subsector of PHE that is most vulnerable when demands slows". But the trend will affect each institution separately, and it is important to recognise that each university can determine its own future.

But, finally, 'fair' access to higher education and reducing social inequality in access to higher education is actually sector-blind. From the perspective of equitable access to higher education, the intersectoral differences (that is, future sector-related differentiation or de-differentiation (de-differentiation being the 'natural' trend in higher education, Rhoades 1990: 191) seem largely irrelevant. The expansion of the tuition-free public sector (from 0.85 million in 2010 to, say, 1 million students in 2020) amid declining demographics, accompanied by the contraction of the fee-based private sector and the contraction of the whole system, may contribute significantly to widening access to higher education. From a sector-blind perspective, regardless of the future of the private sector institutions, the expansion of tuition-free vacancies in the public sector in tough financial times may contribute more to social justice (see Furlong and Cartmel 2009) than the emergence of fee-based vacancies in both sectors with mechanisms of cost-sharing introduced universally across the two sectors.

## Conclusions

The dramatically changing demographics in Poland are creating new dilemmas related to public funding and admissions criteria in both public and private sectors. Public policy for higher education in times of expansion can be expected to be fundamentally different from public policy in times of contraction. The chapter explored the question of inequality in access to higher education with reference to the past two decades of expansion and to the expected upcoming two decades of contraction of the system. The era of

contraction seems unexpected in the knowledge-economy policy discourse which generally ignores the possibility of sharply falling demographics that is relevant to higher education systems in only several European countries and only a few OECD economies, Poland included. Educational contraction in Poland's highly diversified and strongly market-oriented system may continue the inequality reduction trend if national policies adequately respond to the changing demographics combined with new social and economic determinants. There are several countries in the European Union – all post-communist new member states – in which similar demographic shifts are leading to shrinking student populations to a comparable degree. Poland has the biggest higher education system and provides an inspiring case study, relevant to those countries in which the changing public/private dynamics are combined with falling demographics. Powerful demographic shifts may change the structure of the system, and the options of the remonopolisation of the system by the public sector and the gradual (spread over the next decade) decline of the private sector cannot be excluded (but the market-driven private sector has also been highly resilient and easily adaptable to changing environments in its history). The processes of the inter-sectoral differentiation of the expansion era may be replaced with the processes of the inter-sectoral de-differentiation (or homogenisation) of the contraction era.[3]

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# The Globalisation Challenge for European Higher Education

## Convergence and Diversity, Centres and Peripheries

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